



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/401,080	09/22/1999	TAKASHI SHIKAMA	36856.00218	4173

7590

12/13/2002

JOSEPH R KEATING ESQ
INTELLECTUAL PROPERTY GROUP
10400 Eaton Place Suite 312
fairfax, VA 22030

EXAMINER

NGUYEN, TUYEN T

ART UNIT

PAPER NUMBER

2832

DATE MAILED: 12/13/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/401,080

Applicant(s)
Shikama et al.

Examiner
Tuyen T. Nguyen

Art Unit
2832



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Nov 12, 2002
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-11 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

Art Unit: 2832

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 3-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 8-306570 in view of JP 63-79306 and JP 3-171702.

JP 8-306570 discloses a composite inductor element [see figure 5] comprising:

- a rectangular parallelepiped shaped block [1];
- at least four spirally wound coils [2] arranged parallel relative to each other buried within a composite material forming the block, said coils having axes extending in the same direction; and
- substantially U-shaped external electrodes mounted on the block for connections to the ends of the coils.

JP 8-306570 discloses the instant claimed invention except for the composite material bring at least either resin or rubber having a magnetic material disposed therein and at least one of the four coils having a different electrical characteristic produced by a different thickness of one of the four coils from that of the remainder of the four coils or a different diameter of one of the four coils from that of the remainder of the four coils.

Art Unit: 2832

JP 63-79306 discloses an inductor having a coil [1] buried in a block [2] formed of resin material having a magnetic material dispersed therein.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the block material of JP 63-79306 for the composite material of JP 8-306570 for the purpose of enhancing the inductance of the device.

JP 8-306570 in view of JP 63-79306 discloses the instant claimed invention except for at least one of the four coils having a different electrical characteristic produced by a different thickness of one of the four coils from that of the remainder of the four coils or a different diameter of one of the four coils from that of the remainder of the four coils.

JP 3-171702 discloses an inductor device [figures 4-6] including a plurality of coils [22-1, 22-2 or 32-1, 32-2] disposed in a magnetic block [24 or 34] wherein the plurality of the coils having different diameters [figure 5].

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the coil design of JP 3-171702 in JP 8-306570, as modified, for the purpose of controlling the inductance output.

Official notice taken to the effect that it is well known that the coil inductance can be vary by the number of turns, thickness and the diameter of the wire for the winding.

Response to Arguments

3. Applicant's arguments with respect to claims 1 and 3-11 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2832

The specific material use for the external electrodes would have been an obvious matter of design choice based on cost considerations and necessary electrical conductivity.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Tuyen T. Nguyen whose telephone number is (703) 308-0821.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Elvin Enad, can be reached at (703) 308-7619. The fax number for this Group is (703)872-9318 before the final office action, if the response is after final office action the fax number is (703)872-9319.

Any inquiry of a general nature or relating to status of this application of proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

TTN *TTN*

December 11, 2002

Tuyen T. Nguyen